

# archives.gov web site analysis & recommendations

March 25, 2010

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### objectives

NARA is seeking to overhaul the archives.gov site beginning with a redesign of the home page...

#### Several factors make this project necessary:

- Many users find the site difficult to navigate and critical information hard to find.
- The home page is cluttered with too much information and redundant links.
- Ongoing edits and updates have given many sections of the site an ad-hoc feel and have diminished the strength of the overall organizational scheme.

#### The purpose of this report is to:

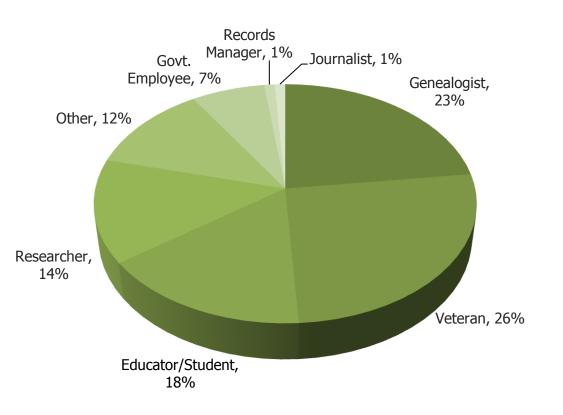
- Present available site usage data in an easy-to-understand, actionable format.
- Identify core constituencies and their needs.
- Analyze key site pages and identify areas needing improvement.
- Identify best-practices used by similar sites.
- Present an overall strategy for the organization and visual design of the new site with initial focus on the home page and key second-tier (portal) pages.



#### section II

# site usage data analysis

### who is using the site?

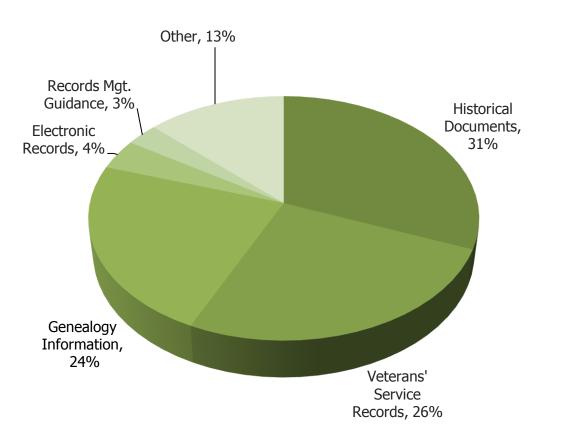


#### **Notes:**

- The top four user types (genealogist, veteran, educator/student and researcher) account for 81% of the total visitors.
- "Other" primarily consists of users looking for general information or browsing without a specific goal.
- The "Government Employee" category includes federal, state and local government employees.
- Federal Records Managers have been tracked in a separate ACSI Survey since 10/1/2008 so it is likely that the 1% rate shown here under represents the actual number of records managers visiting the site.

source: ACSI Satisfaction Survey (1/1/2009-12/31/2009)

### what are they looking for (overall)?



#### **Notes:**

- The top three items (historical docs, service records and genealogy information) account for 81% of the desired information.
- "Other" consists of the following:
  - Events Information (2%)
  - Lesson Plans (2%)
  - Federal Register Publications (2%)
  - Address/Hours (2%)
  - Online Exhibits (2%)
  - Ordering and Forms (1%)
  - Grant Information (1%)
  - Employment Information (1%)
- The ACSI Survey includes a write-in "Other" category that accounted for 12% of the total. Review of the write-in results showed them to be largely distributed among the top three items. Consequently, this 12% has been applied proportionately to these items.

source: ACSI Satisfaction Survey (1/1/2009-12/31/2009)

# what they are looking for (by audience)?

	Top-Ranked Item	Second-Ranked Item	Third-Ranked Item
Genealogist or family historian	Genealogy information	Veterans' Service Records	Historical Documents
	67%	11%	9%
Veteran or veteran's family	Veterans' Service Records 69%	Historical Documents 8%	Genealogy information 7%
Researcher	Historical Documents 56%	Other 15%	Online Electronic Records 7%
Educator or student	Historical Documents	Lesson Plans	Other
	56%	13%	13%
Journalist	Historical Documents 45%	Other 30%	Genealogy information 10%
Federal govt. employee	Other	Records Mgmt. Guidance	Historical Documents
	22%	20%	18%
State or local govt. employee	Historical Documents	Records Mgmt. Guidance	Other
	24%	20%	20%
Federal Records Manager	Records Mgmt. Guidance 33%	Veterans' Service Records 21%	Online Electronic Records 12%
Other	Historical Documents	Other	Veterans' Service Records
	36%	27%	7%

source: ACSI Cluster Data Survey (12/1/2008-12/31/2009)

### what they are looking for (by audience)?

#### **Notes:**

- The majority of each audience group, from a high of 87% (genealogists) to a low of 62% (state and local government officials), sought the three top-ranked items listed on the prior page.
- Visitors that selected "Other" and had a high satisfaction score (which implies that they likely found the information they sought) were commonly looking for the following items:
  - Information on specific historical events/eras (JFLK assassination, woman suffrage, Civil War, etc.)
  - Electoral College information
  - 75<sup>th</sup> Anniversary information
  - Privacy policy
  - Non-specific browsing "just seeing what's there"
- Visitors that selected "Other" and had a low satisfaction score (which implies that they did not find the information they sought) were commonly looking for the following items:
  - Information not maintained by the Archives (tax forms, US savings bonds, unemployment statistics, etc.)
  - Military record request forms (SF-127 and DD-214)
  - Hiring a researcher/meeting an archivist
  - Listing of events
  - Prologue magazine online
  - Microfilm for sale
  - Tour information

source: ACSI Cluster Data Survey (12/1/2008-12/31/2009)

# what pages are they viewing?

Rank	Page Name	% of Views	Views
1	World War II Photos	5.4%	4,356,651
2	Home Page	4.5%	3,588,183
3	<u>eVetRecs</u>	3.9%	3,106,275
4	How to Request Military Service Records or Prove Military Service	2.8%	2,222,906
5	<u>Constitution of the United States</u>	2.2%	1,763,827
6	Bill of Rights	1.8%	1,427,199
7	<u>Declaration of Independence</u>	1.5%	1,225,365
8	Resources for Genealogists and Family Historians	1.1%	878,243
9	<u>Charters of Freedom</u>	1.0%	840,071
10	DD Form 214, Discharge Papers and Separation Documents	1.0%	778,119
11	About NARA's Holdings	0.8%	616,232
12	<u>Veterans and Their Families</u>	0.8%	603,427
13	Military Personnel Records, SF-180 (St. Louis Archives)	0.7%	602,490
14	<u>Transcript of the Constitution of the United States</u>	0.7%	567,119
15	Military Personnel Records	0.7%	562,788
16	Archival Research Catalog (ARC) of the National Archives	0.7%	539,191
17	Bill of Rights Transcript	0.6%	518,040
18	Military Personnel Records, SF-180 (Veterans Section)	0.6%	513,795
19	Military Service Records and Official Military Personnel Files	0.6%	492,816
20	<u>Visit Us</u>	0.5%	426,943
	Other	66.3%	53,273,404
	Total		80,390,860

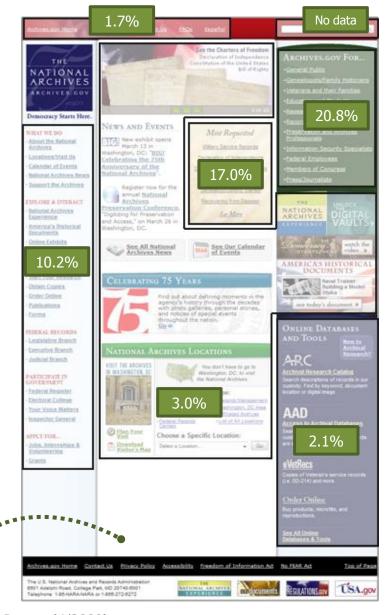
### where do they click?

An analysis of the click stream data from the home page clearly shows how visitors are using this page to explore Archives.gov.

- There is a bounce rate (users who leave the page before exploring further) of 45.2%.
- The users who do choose to stay click on links in the following sections (in order of popularity):

•	"Archives.gov for"	20.8%
•	"Most Requested"	17.0%
•	Main Navigation Bar	10.2%
•	Main Content Area	3.0%
•	Databases & Tools	2.1%
	Global Links	1.7%

 Of the links in the main content area, the overwhelming majority are within the "National Archives Locations" section.



source: WebTrends Click Report (4/2009)

45.2%

### where do they click? part II

Of the 20.8% of home page clicks that occur within the "Archives.gov for..." section, the distribution varies widely by audience type.\*

- Genealogists and researchers account for the majority of clicks within this section.
- The general public, veterans and records managers also account for a reasonably large percentage of clicks.
- Four links receive virtually no clicks—Preservation and Archives Professionals, ISOO, Members of Congress and Press.
- For further information on these audience types, see Section II of this report.

<sup>\*</sup>While we believe that this analysis is helpful in determining which audience groups are likely to utilize role-based links on the home page, it is not an accurate measure of the distribution of users across the site. For this measure, we have relied upon the ACSI survey data shown on page 5.



source: WebTrends Click Report (4/2009)

### what does this mean?

- Initial site efforts should address the key user groups as defined by the traffic/click analysis and NARA priorities (see Section III for more detail).
- The distribution of materials being accessed roughly corresponds to the percentage of related users.
  - 24% of visitors identify themselves as genealogists/family historians and 24% of searches are for genealogy-related information.
  - 24% of visitors identify themselves as veterans/veteran family members and 26% of searches are service record-related.
  - While audience-based home page clicks don't correspond as closely to the ACSI data, they still support the prioritization of audience types proposed in Section III of this report.
- Visitors spend a lot of time on the home page (00:01:02). This suggests they have a difficult time finding where they need to go.
- Home page access is low (1.8MM views in 9.5MM visits). This suggests
  users are directly accessing internal pages (either via search or bookmarks)
  and increases the burden on internal pages to provide universal access.
- The 45.2% home page bounce rate is high and suggests users are unable to find the information they need and leave rather than try and "dig" for it.

### what do visitors like about archives.gov?

"Easy access to download request forms and online requesting."

"It has the information I wanted in an easy to access format."

"Ease of obtaining veterans records."

"Endless information."

"Very professional look."

"I found the form that I needed."

# "Soooo comprehensive!"

"Segmentation"

"That it's here!"

"Lesson plans work well in class and are a good resource for secondary teachers."

"Solid information architecture, in my humble opinion."

"The headings on the website are very helpful."

source: ACSI Satisfaction Survey (7/1/2008-12/31/2008) responses typical of users rating the site with a satisfaction score of 100

### what don't archives.gov visitors like?

"This is way too complicated."

"A simple (Google-style) search engine."

"Less government-like."

"More access to information."

### "Too cluttered."

"Don't tell us how to find info; just give it to us."

"Accuracy."

"Needs Simplification."

"Easier speed in finding what I'm looking for—too much jumping around the site."

"Make this site easier to navigate."

"KISS (keep it soldier simple)."

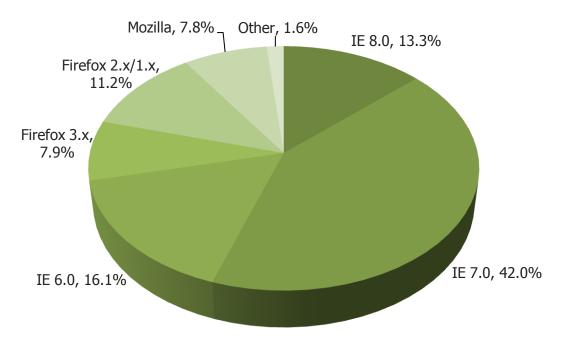
"Put all documents and photos in one place."

source: ACSI Satisfaction Survey (7/1/2008-12/31/2009) responses typical of users rating the site with a satisfaction score of 0

### what does this mean?

- Overwhelmingly, visitors are impressed with the sheer quantity and quality of information available on the site.
- Not surprisingly, the quantity of available information makes finding specific items or accomplishing specific tasks frustrating for many visitors.
- What is surprising is that while many visitors were critical of the organization of the site, many others praised the site for the same reason.
- Any redesign effort must be careful not to alienate frequent users who are accustomed to the current layout and, through repeated use, know where things are located. To this constituency, new is not always better.
- Many comments (not included in this report) are specific to particular tasks and sections. Care should be taken to identify these types of comments when redesigning deeper content areas.

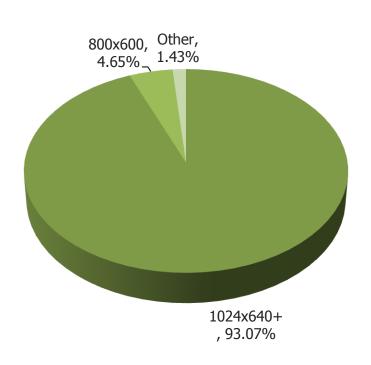
### what are they browsing with?

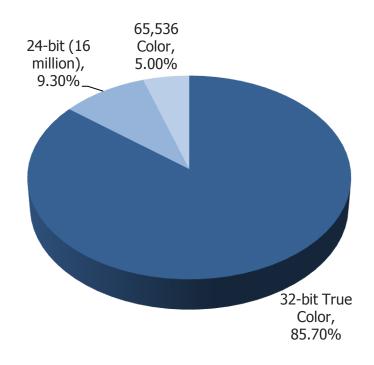


#### **Notes:**

- Together, IE and Firefox account for 90.65% of site visits.
- IE 6.0 continues to lose popularity (it accounted for 25.5% visits in the previous version of this report).
- "Other" includes the following major browser types:
  - Safari (0.22%)
  - Opera (0.43%)
  - Netscape Compatible (0.55%)
  - Spiders (0.07%)
- It is worth noting that c. 6,900 visits out of 19.3MM were made using a WAP or smart phone browser.

### how are visitors viewing the site?



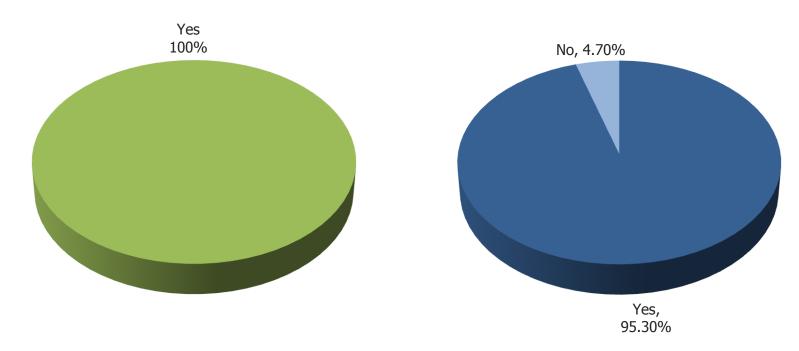


**Screen Resolution** 

**Color Depth** 

This data is consistent with the standards described in NARA's Web Development Guidelines and should underscore the benefits of a wider (going from 750px to 800-900px), graphically rich site design.

### what technologies do they use?



Is JavaScript turned on?

Is Java supported?

This suggests that a more robust implementation of client-side technologies (especially degradable JavaScript-driven AJAX, which is used on NARA@Work) might be implemented to enhance user interactions.

### veteran audience observations

The ACSI Cluster Data Survey provides some revealing insights regarding the veterans and veterans' family members visiting the site:

- Overall the satisfaction level with the three primary categories of information (see page 7) is above average (4<sup>th</sup> quintile). These scores are (on a scale from 0-100):
  - Veterans Looking for Service Records: 73
  - Veterans Looking for Historical Documents: 69
  - Veterans Looking for Genealogical Information: 61
- Of the visitors who were dissatisfied with the site, the primary reason was due to an inability to find service records for themselves or their family members.
- Potential improvements include:
  - Making it easier to find family member records. Most people not looking for their own records are looking for those of a parent or grandparent and would like searching options tuned to their specific needs.
  - Providing disclaimers for eVetRecs that explain that: eVetRecs does not work in all browsers and the site's certificate might not be recognized as secure. Contact information should be provided for those that need to reach EVetRecs directly.
  - Many visitors are looking to replace medals or records lost in a fire and would like content/searchability directly related to this circumstance.

### genealogist audience observations

The ACSI Cluster Data Survey also provides insight regarding the genealogists and family historians visiting the site:

- Genealogists are primarily looking for information related to the following terms:
  - military records
  - census records
  - naturalization records
  - service records
  - immigration records
  - WWI records
- Unsatisfied genealogists are primarily looking for military and census records. They
  are also seeking immigration records, and by a smaller percentage, naturalization
  records.
- When linking to pay sites, clarify that they're free when accessed via Archives Research Room. Related respondent replies include:
  - "Building the Geneology tree required a subscription?"
  - "My tax dollars pay for this site why do I have to pay Ancestory.com again to get information."
  - "Instead of giving me any info it kept forwarding me to fee-based sites. Not what I expected!!!"







section III

# visitor segments

### introducing visitor segments

- To design a goal-focused site, it is critical to understand what types of people are using the site (audience segments) and what they want to do (goals).
- Seven segments were identified in the ACSI Satisfaction Survey:
  - Genealogists/Family Historians (24%)
  - Veterans/Veterans' Families (24%)
  - Educators/Students (18%)
  - Researchers (13%)
  - General Users (12%) percentage has significant overlap with the other categories listed on this page.
  - Government Employees (8%) approximately 1/3 are seeking personal veteran and genealogy records
  - Federal Records Managers (1%)
- Additionally, archives.gov currently has specialized information for:
  - Preservation and Archives Professionals
  - Information Security Specialists
  - Members of Congress
  - Print/Broadcast Journalists

### approaching visitor segments

- Since the overwhelming concentration of visitors (over 80%) is clustered within a few groups, initial work should be done addressing the needs of a few segments:
  - General Users primarily people seeking to visit an Archives facility
  - Genealogists/Family Historians
  - Veterans/Veterans' Families
  - Educators/Students
  - Researchers
  - Federal Records Managers
- Currently, the information required to build solid profiles of these user groups is scarce. Further research should be done to determine:
  - Personas for typical users within these groups.
  - Browsing paths taken by these groups through the Archives.gov site.
  - A clearer understanding of their objectives.
  - A clearer understanding of their difficulties using the current site.
- These segment profiles are based on an analysis of frequently accessed pages, ACSI survey comments and current NARA objectives.

### general users

#### **Description**

This segment accounts for less than 10% of site visits and consists of people planning a visit an Archives facility or just seeking general information.

#### **Typical Tasks**

- Plan visits and learn about upcoming events at an Archives facility.
- View photos, historical documents and online exhibits.
- Read the Federal Register and other Archives publications.
- Get information and apply for jobs and grants.
- Access forms and ordering information.

- Since this group is a catch-all for non-categorized visitors, perhaps it should be renamed and narrowed to focus on people planning to visit the Archives (including those looking to supplement a recent visit or seeking a virtual tour).
- Job and grant seekers are small, but vital subsets of this group and attention should be given to
  provide a clear path to the relevant information and tools available to these groups.

### genealogists & family historians

#### **Description**

This segment accounts for 24% of site visits and consists of both professional genealogists and individuals interested in learning more about their family history.

#### **Typical Tasks**

- Find information about performing genealogical research.
- Learn what genealogical resources are available from NARA.
- View historical documents (service records, Native American census data, etc.) relevant to specific family members.
- Access forms and ordering information to take research to the next level.

- Archives.gov is not a general purpose genealogy site. Available resources and who they are relevant for should be made immediately clear.
- There is significant content overlap between this section and the Veteran's section. Military service
  information should be filtered so as to only present the content most relevant to genealogical
  research.
- Specific user groups (e.g. veterans, American Indians, African-Americans) with more robust historical content should be directly addressed.

### veterans & their families

#### **Description**

This segment accounts for 24% of site visits and consists of former armed service members and their families.

#### **Typical Tasks**

- Access service records through eVetRecs or order copies online.
- Locate information on friends and people they served with.
- Access historical documents—particularly those relevant to the military (WWII photos are popular).
- Understand what benefits are available to veterans and how to apply.

- While the primary purpose of the site for this audience group revolves around obtaining service records, it is clear the veterans who use the site are seeking information on all things military (benefit applications, health records, lists of medals and commendations, former comrades, photos of units and divisions).
- While the Archives is clearly not in the business of providing all of this information, research should be done to determine the most commonly searched for items (most likely records and photos) and employ a sophisticated online index to the other agencies that provide more comprehensive information and services.

### educators & students

#### **Description**

This segment accounts for 18% of site visits and consists of educators and primary/secondary/college students seeking to use the Archives' resources for lesson planning or research purposes.

#### **Typical Tasks**

- Plan visits and learn about relevant events at the Archives and its sister facilities (for class trips and individual enrichment).
- View historical documents and online exhibits to produce reports and projects for American history and civics classes.
- Access lesson plans.
- Access forms and ordering information to take research to the next level.

- Lumping teachers and students into the same category may not be the most effective organizational technique. There should be distinct differences in the online goals of these two groups.
- Likewise, it may be prudent to break student information into kids and young adult categories. The types of research performed, required tone of voice and visual display of information should be markedly different between these sub-segments.

### researchers

#### **Description**

This segment accounts for 13% of site visits and consists of professional historians and other parties seeking to use the Archives for serious research.

#### **Typical Tasks**

- Plan visits to Archives facilities for on-site research.
- View historical documents.
- Access online electronic records, especially photos.
- Access forms and ordering information.

- This group is comprised of professionals who typically require access into the "bowels" of the Archives. Their searches tend to be very specific (e.g. "the first and last pages of the Marshall Plan" or "information on WWII Ordnance plant near Marion, IL). Therefore, available resources must be made clear and "professional-grade" tools should be provided to enable easy access to historical records.
- A deeper analysis of site traffic data should show that this group is composed of people who use
  the site frequently. This segment is probably the best candidate for any future initiative involving
  portal page personalization.

### federal records managers

#### **Description**

This segment accounts for 1% of site visits\* and consists of persons responsible for the storage, management and archiving of agency records. Because a ACSI Customer Satisfaction survey was administered specifically to visitors within this category, we have a more thorough understanding of who they are and what they're looking for. This information is contained on the following two pages.

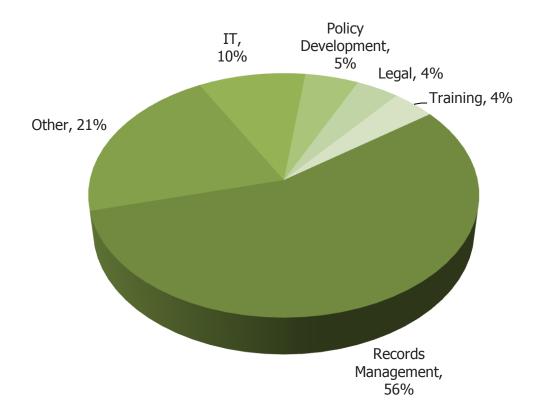
#### **Typical Tasks**

• Refer to the "What are records managers looking for?" slide for a detailed breakdown of the information visitors in this category are seeking.

- While records managers may only account for a small amount of total site traffic, they are also a major source of revenue for the Archives. This gives them an importance disproportionate to the size of the audience and the segment's role in any redesign effort should reflect this fact.
- In the separate, records management ACSI satisfaction survey, the overall satisfaction score (from 10/01/08-03/31/09) was 71 (compared to an overall site score of 67).
  - Records managers ranked the site's performance and content the highest with scores of 84 and 80, respectively.
  - They gave search and navigation the lowest marks with respective scores of 69 and 68.

<sup>\*</sup>according to NARA, this figure may under represent the actual number of RMs accessing the site.

### what types of records managers are visiting?



#### **Notes:**

- This chart shows the primary responsibility of records management professionals visiting the site.
- The ACSI Survey includes a write-in "Other" category that accounted for 21% of the total. Popular responses within this category include:
  - Consultant
  - Administrative assistant
  - Federal employee
  - Records manager
  - Teacher/student
  - Business analyst

source: ACSI Records Management Satisfaction Survey (10/1/2008-3/31/2009)

### what are records managers looking for?



#### **Notes:**

- About 2/3 of responses are clustered in the top four categories (General Records Regulations and Info., Electronic Records Mgt. Guidance, General Records Schedules and Other). In these categories, responses are distributed fairly evenly between them
- The "Other" category requires a write-in response. Some of the more frequently used responses include:
  - Document standards
  - Disaster planning
  - Best practices
  - Conference information
  - Records disposition
  - Training and tutorials

source: ACSI Records Management Satisfaction Survey (10/1/2008-3/31/2009)

# other visitor segments

Segment	Government Employees	Journalists
% of visits	Federal: 6% State/Local: 2%	< 1%
Description	Employees of federal, state and local government agencies.	Print, broadcast and online producers of journalistic content.
Primary Goal	For federal employees, the goal is to find information that helps them perform their job. State and local employees tend to be more interested in information for personal use.	Report on current events concerning the Archives and, when needed, supplement other reporting with historical research.
Typical Tasks	<ul> <li>Get Employment Information</li> <li>View Federal Register</li> <li>Access Electronic Records</li> </ul>	<ul> <li>Get Addresses/Hours of Operation</li> <li>Find high-resolution images</li> <li>View Current News &amp; Events</li> <li>Access Historical Documents</li> <li>Access Forms and Ordering Information</li> </ul>



#### section IV

# key page analysis

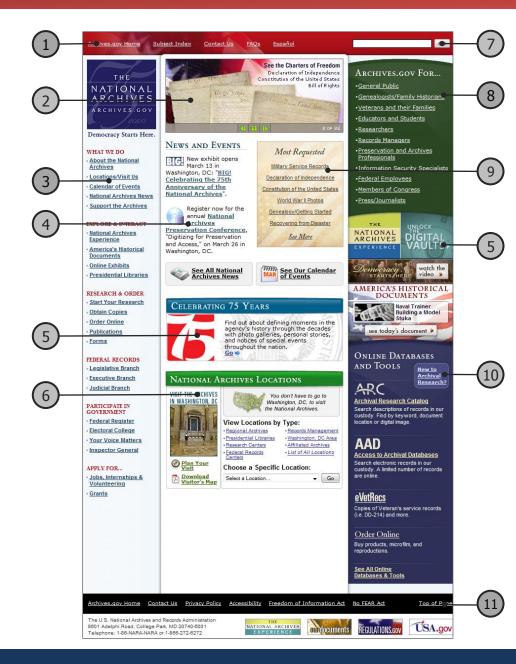
### about key pages

- Broadly, there are three main types of pages employed on the archives.gov site. These pages are:
  - Home Page: Gateway to the entire site that provides orientation for every user type.
  - Section (Portal) Pages: Summary pages for individual sections that provide orientation and information within specific categories (veterans, Archives locations, etc.)
  - Content Pages: Pages containing information. These are the core pages of the site and are accessed from section portal pages or other related content pages.
- At a conceptual level, this model works well and should be retained and refined in any site redesign effort.
- There are however, several issues and inconsistencies in how this model is applied. An analysis of how the current site handles these page types is the subject of the following pages.

### home page anatomy

#### Key elements on the home page include:

- 1. Global links present on every site page\*
- 2. Slide show that links to site features and critical content
- 3. Primary navigation\*
- 4. Current news and events
- 5. Featured content
- Links to archives locations
- 7. Site search tool
- 8. Role-based links\*
- 9. Most requested content (corresponding to the most accessed pages described in Section II)
- 10. Links to databases and tools
- 11. Links to disclaimers and other regulatory content.\*
  - \* primary categories of links (see the first bullet point on the following page for further description)



### home page observations

#### Segmentation of Links

The segmentation of navigation into four categories (global, primary navigation, role-based and disclaimers) works well. This should be extended and applied consistently in the site redesign.

#### Slide Show

While the function of the slide show is well intentioned, the number of slides is probably too great and their clickability is not obvious. A redesign should consider replacing this element with one that serves the same function (compactly showing a breadth of features) more effectively. See the case study examples (Section VI) for some possible alternatives.

#### Naming Conventions

Links in the primary (left-hand) navigation bar should be named consistently using either a descriptive (e.g. "Online Exhibits") or an imperative (e.g. "Start Your Research") voice *but not both*. Longer, "trigger-word" packed link names are recommended.\* Additionally, testing should be performed to ensure that naming is logical and utilizes terms consistent with expectations.

#### Role-Based Links

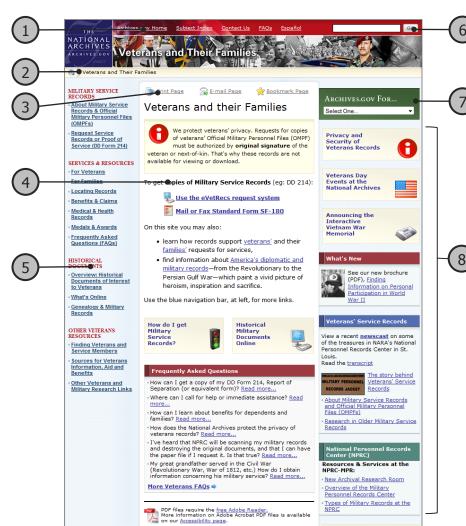
Having these links on the home page is very helpful. In fact, it should become a more prominent feature to help users self-select their needs and get to the information they need more quickly. As it stands however, there are probably too many roles listed. The list should be culled to represent the top user categories with an "Other..." link providing access to portal pages for less common user visitor segments.

<sup>\*</sup>See Jared Spool's article "Designing for the Scent of Information" UIE Fundamentals Reports, 2004

## section page anatomy

# Key elements on second-level (section portal) pages include:

- 1. Global links present on every site page
- 2. Breadcrumb navigation
- 3. Page tools
- 4. Primary page content (occupies entire middle column below page tools)
- 5. Primary section-level navigation
- 6. Site search tool
- 7. Role-based content links (not present on every page)
- 8. Section features (vary based on page content)



## section (portal) page observations

#### Types of Section Pages

The current site implies (but does not apply consistently) that there are two types of sectional portals—task-based ("Explore and Interact") and role-based ("Researchers"). This is a good organizational paradigm and should be developed, refined and applied throughout the site.

#### Overall Organization

Though the "anatomy" diagram on the previous slide implies that there is a consistent and logical organization to these portal pages, the availability, placement and hierarchy of key page elements (e.g. the role selector) is inconsistent among different task- and role-based portal pages. A flexible template should be developed for all portal pages that provides consistent usability.

### Primary Navigation

Primary (left-hand) navigational links change from page to page within a category. Once a user enters a particular site section, the primary navigational elements should be consistent on all pages. In those sections with deep content, interactive drop-down or fold-out menus should be considered to keep the menu "clean." Some attention must be given to the need for navigation within a particular page's content as well.

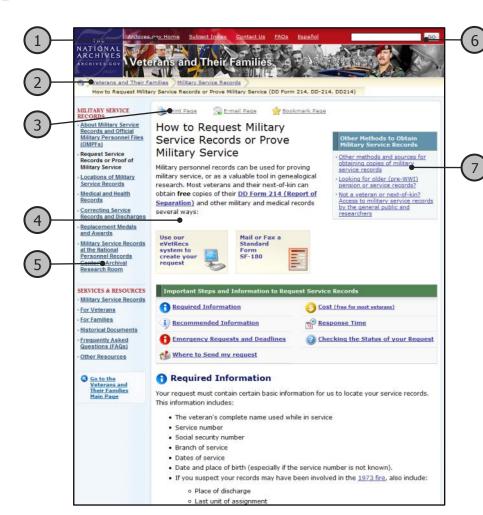
### Quantity of Content

Portal pages should focus on getting users to the content they need instead of providing content. In most cases content should be limited to a description of the section and its contents with the remainder of the page providing enhanced navigation and links into the section's pages.

### content page anatomy

# Key elements on typical internal (content) pages include:

- 1. Global links present on every site page
- 2. Breadcrumb navigation
- 3. Page tools
- 4. Primary page content (occupies entire middle column below page tools)
- 5. Primary section-level navigation
- 6. Site search tool
- 7. Links to additional information.



### content page observations

#### Scope

The redesign of internal content pages is not in scope for the first phase of this project, however future phases should take into account the following considerations.

#### Content Section Navigation

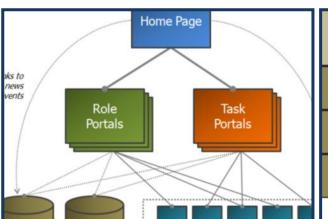
In addition to the items contained in the left-hand primary navigation (see "Section Page Observations"), many content-level pages also provide links to a third level of information (see <a href="www.archives.gov/federal-register/write">www.archives.gov/federal-register/write</a> for an example). In such cases, these links should be accommodated in a third-level navigational system (see "Use of Right-Hand Column" below).

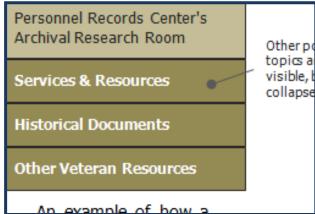
#### Content Column Organization

The flow of the content section is frequently broken up by buttons and icons that hamper usability and make understanding the page difficult. Pages should clearly flow from top to bottom and any images, icons or links inserted into the page should logically relate to the adjacent content.

#### Use of Right-Hand Column

Currently (when it's employed) the right-hand column is used as a general purpose "catch-all" for links and tools that don't seem to fit anywhere else on the page. In future project phases, the function of this column should be clearly defined so users know what to find in this location and are confident it remains conceptually consistent from page to page.







#### section V

## recommendations

## key page goals

Each page type described in the previous section has a specific function to play relative to a visitor's overall experience. The schematic, navigational, user test and visual designs for each type should focus on supporting these functions.

	Primary Objective	Secondary Objectives
Home Page	Get visitors to the most relevant portal page as quickly as possible.	<ul> <li>Allow visitors to accomplish most common tasks via a single click and directly access popular content areas.</li> <li>Provide a visual overview of the breadth of the site's content.</li> </ul>
Portal Pages	Allow users to accomplish the common tasks associated with the portal's content.	<ul> <li>Provide a visual overview of the depth of the section's content.</li> <li>Provide the means to redirect users in case they've landed in the wrong section.</li> </ul>
Content Pages	Deliver the information sought by the visitor in a clear, easy-to-follow manner.	<ul> <li>Provide the means for visitors to explore more detailed or related topic content.</li> <li>Provide the means to redirect users in case they've landed on the wrong page.</li> </ul>

## navigation systems

To accomplish the goals set forth on the previous page and accommodate the browsing styles of the broadest number of users, a number of different modes of navigation should be developed and tested in the redesign effort:

#### Traditional Menus

The hierarchy of menus in traditional navigational bars is familiar and has the benefit of presenting the most comprehensive "at a glance" snapshot of the site content. However, in a site as large and complex as Archives.gov, developing a comprehensive information hierarchy is a daunting challenge. Therefore, we believe this mode should be complemented and supported by three other systems.

#### Traditional Search

While not used by all, the search box is the first option used by many visitors who seek specific information. It is also the last resort option for users frustrated by the menu system. The usability of this system must not be overlooked.

#### Role-Based Navigation

Given the clearly defined types of visitors who use Archives.gov (see Section III) and the popularity of the role-based links on the current home page, some groups should be able to self-identify themselves and browse within an information context designed according to their role. Role-based navigation should be limited to those groups with role-specific content (i.e. veterans, educators). Groups whose top tasks merely involve searching content not specific to their role (i.e. journalists, general public) should rely on the other navigation methods.

#### Task-Based Navigation

Designing navigation around visitors' goals is a critical component of the redesign effort and is described in detail on the following page.

## task-based navigation

- Task-based navigation provides at least two benefits:
  - Visitors are able to direct their browsing experience based on their needs and will frequently be able to avoid having to navigate multiple levels of menus to find the content they seek.
  - The NARA Web Program will be able to better measure the site's effectiveness based on how well a user is able to accomplish a specific task. Specific click paths can be analyzed and site traffic patterns monitored so that the site can be continually tuned to the needs of its visitors.
- Since many of the tasks that visitors perform are open-ended (e.g. research historical documents) and don't have a concrete, measurable goal (e.g. view the Bill of Rights) it will be difficult to quantify how effective the site is in helping visitors achieve many of its tasks. This drawback is also present, in varying degrees, in the other three navigation modes.
- The task-based focus will be most effective when employed on portal pages. There, a comprehensive list of tasks related to a user's objective (e.g. research genealogy, learn about the Archives) should be prominently placed.
- Task-based navigation systems are not meant to be comprehensive. The depth and detail within many sections is such that it is not possible to design task-based navigation to cover every contingency. Instead, task-based navigation should be designed to focus on those tasks most commonly performed within a section allowing visitors with less common informational needs to rely on the other three modes of navigation.
- Critical tasks are being identified via three methods:
  - Analyzing click stream data and search terms (from internal and third-party search engines).
  - Observing real users as they use the site to perform real and relevant tasks.
  - Asking users directly via online surveys.

## use of navigation systems

The four types of navigational systems should not be employed equally among the different page types. There are points in a user's browsing experience where different systems should carry different weights. The relative importance of each system is detailed below (with three stars representing the greatest weight).

	Home Page	Portal Pages	Content Pages
Traditional Menus	**	**	<b>***</b> 1
Traditional Search	<b>***</b> 2	***	***
Role-Based Navigation	***	<b>*</b> 3	*
Task-Based Navigation	<b>*</b> *4	***	*

- 1. Once a visitor has reached a content page, the navigational menus and links within the page itself take precedence as the primary means of finding related content. While important on the home and portal pages, our goal is to have users employ the task- and role-focused systems as the primary means of finding the information they seek.
- 2. Traditional search is important at all stages in a user's experience. It is the means used by many visitors to initiate their browsing process and it is also used by visitors to extend their experience or find information they are unable to locate by other means.
- 3. Role-based navigation is most important on the home page. Once they have reached a portal or content page, the presumption is that visitors will have identified themselves or the general category of information sought and the need to further self-identify is significantly diminished.
- 4. Because of the sheer number of tasks available to visitors, task-based navigation should be limited to only the top few site wide tasks on the home page. Once a visitor has reached a portal page, these pages should carry a comprehensive list of task-directed links specific to that portal's content.

## reimagining the home page

- The primary purpose of a home page is to quickly and efficiently facilitate navigation into all areas of the site with easy to differentiate links. That's not the case here.
  - The site has too much content to try and organize within the scope of a single page.
  - There are too many diverse types of visitors having radically different needs to be successfully served from a single page.
  - There are too many internal groups with valid, relevant needs to try and satisfy using one page.
- The overall design goal of the home page should be to get users off the page as quickly as possible. A successful design should show significantly shorter average view times for this page.
- To accomplish this, the home page should serve four purposes (other than providing a rich, enticing introduction to the site):
  - Take users to relevant portal pages.
  - Provide direct links to help users accomplish the most common site tasks.
  - Provide direct links to popular, frequently-accessed site content.
  - Highlight featured content and current news and events and provide links to further information on these topics.

## reimagining portal pages

- Portal pages are the workhorse of the site.
  - Visitors with specific needs or belonging to a specific audience group will typically remain within a single portal for the duration of their visit(s).
  - Visitors will frequently bookmark or be directed to portal pages (from search results) so these pages need to clearly enable access to other portals/site sections.
- As mentioned in Section IV, primary navigation should be consistent and predictable on all pages within a portal section.
  - Significant real estate should be dedicated to providing a catalog of common task links relevant to the portal's content.
  - Each portal needs to be organized by a single, consistent menu system present on all content pages within that portal. This menu should focus on the task-orientation of the page in question and minimize the prominence of non-task-related links.
  - This menu system should balance the need to have all the content within a portal section at a visitor's fingertips with the need to have the most relevant pages even closer.
  - Breadcrumb navigation should be retained.

## reimagining portal pages, cont.

- All pages within a portal should have a consistent visual identity.
  - Header images should remain consistent on all pages within a portal (this is more or less how the current site operates).
  - Color should be used to brand portals. Selecting a sub-palette of colors and applying it consistently throughout a portal helps provide wayfinding cues (see the "Other Design Considerations" page in this section) and can enhance usability.
  - The type and level of imagery used should be appropriate to the portal's audience (e.g. students will likely respond to a different level and style of images than, say, professional historians).
- Portal pages should be designed (within a consistent framework) to best serve the section's content.
  - Non-navigational elements should highlight features, current news & events related to the portal's topic and list common user questions.
  - Commonly used tools (like military record searches) can be included by providing a simplified version of the tool directly on the portal page with a link to a more robust version if so required by the user.
  - Portal pages should be dynamic and frequently updated to reflect the latest information and ensure that they are serving the needs of the portal's constituent audience.

## portal page candidates

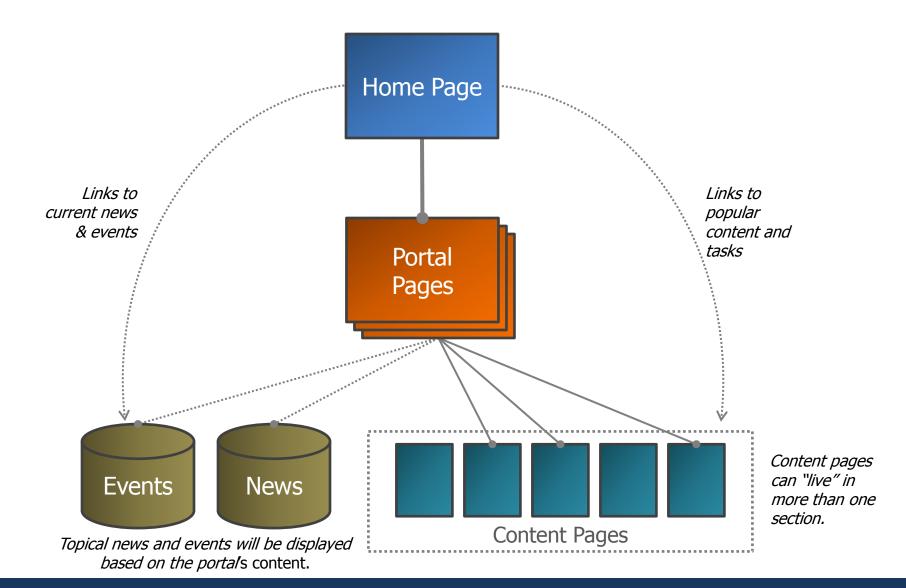
This list provides illustrative candidates for the site's portal pages. Though not comprehensive or final, this list shows how the site's content can be organized within the portal framework. Bold entries indicate high priority items.

- Genealogists & Family Historians
- Veterans & Their Families
- Teachers
- Federal Records Managers
- Preservation Professionals\*
- Information Security Specialists\*
- Archives Facilities (one per location)
- Presidential Libraries
- Government Records (consolidate branches)
- Espanől
- News
- Events

- About the Archives
- Historical Documents
- Research Tools
- Exhibits
- FRC
- Employment Opportunities
- Grants
- Publications
- Archives Store
- Contact the Archives
- Frequently Asked Questions
- Ordering Archival Records

<sup>\*</sup> Sections that have unique content but do not receive significant traffic (e.g. ISS and Preservation) should still be organized within the portal framework. However, links to these sections will not receive prominent placement on the home page.

## the plan in action



## other design considerations

#### Adopt a wider page.

Take advantage of the fact that nearly 92% of site visitors are viewing the site at a resolution of 1024 pixels or wider and utilize more horizontal real estate to keep less of the site (especially on portal pages) "below the fold."

#### Paint from a consistent palette.

Add 1-2 primary and 4-5 secondary branding colors to your identity standards. Use these colors to brand the site as a whole, give each section a distinct identity and provide subtle wayfinding cues. Sections targeted at professionals can utilize more muted combinations while ones targeted at students or the general public can be more lively using more vibrant combos. Avoid the scattershot application of color throughout the page currently employed on the site—it's distracting and diffuses viewer attention.

#### Leverage client-side capabilities.

The 100% utilization of JavaScript suggests that complex menus and wayfinding systems can be simplified using a fuller range of modern browser capabilities (including AJAX). While its important that these technologies degrade gracefully for the small percentage of users who may not have such capabilities, it has become standard practice across the web to capitalize on their potential to make complex sites more user-friendly.



Being "colorful" is not always a good thing. Here, the range and inconsistent use of bright colors is distracting and even a little confusing. Consider developing a unique set of general purpose icons using the site's color palette/design scheme.







#### section VI

### ideas in action

### about the case studies

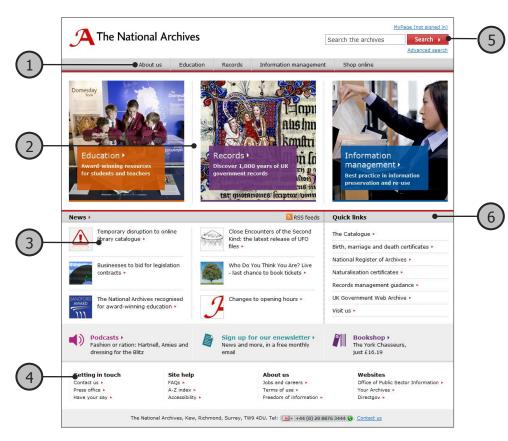
- We've selected eight sites (two from other archival organizations, four from the US government and two from other sectors) that tackle similar challenges to those faced in the redesign of Archives.gov.
- While it is important to look at other government sites when developing a catalog of best-practices, it is equally critical to examine how analogous sites from unrelated disciplines handle similar challenges in usability and information presentation.
- To maintain the focus of this report, we have largely chosen to only look at home pages. However, there are a few examples where showing interior pages allows us to demonstrate relevant insights.
- The sites we examine are:

Archival Organizations	Government	Other Sectors
www.nationalarchives.gov.uk	www.whitehouse.gov	www.microsoft.com
www.naa.gov.au	www.fema.gov	www.nytimes.com
	www.epa.gov	
	www.cdc.gov	

## nationalarchives.gov.uk home

Boasting over a thousand years' worth of historical documents, the UK Archives' site is refreshingly simple and well organized. It has a no-frills home page (no animations, dynamic menus or slideshows) and does not take advantage of social media but it does make it easy to find information.

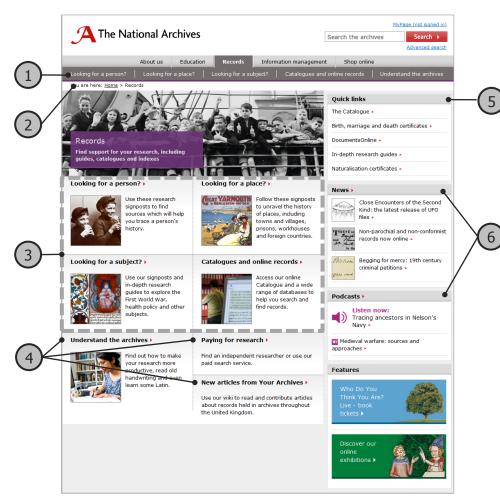
- 1. Navigation is stripped down to the essentials. Fewer choices (when logically named and well organized) mean less confusion for visitors.
- 2. Key sections of the site are emphasized using bold graphics and additional text to clarify the sections' contents.
- 3. News items are given breathing room and cleanly presented (note the well-placed RSS feed link below the purple box).
- 4. Secondary links like contact us and jobs are neatly tucked above the footer.
- 5. Search functionality is logically placed and is supported by a "watermark" tool tip and advanced search.
- 6. Quick links make accessing popular content simple. Labels are clear and concise.



## nationalarchives.gov.uk records page

 As the gateway to the UK Archives' extensive holdings and research-related content, the records page extends the clear, simple organizational model introduced on the home page.

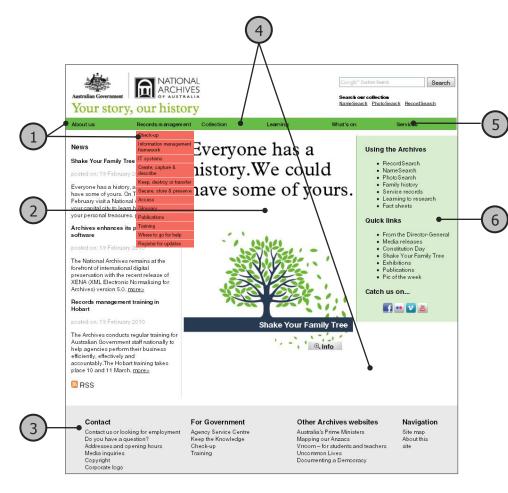
- 1. Secondary navigation remains simple, continuing with the site's "less is more" philosophy
- 2. Breadcrumbs are discretely introduced beginning on second-tier page with a friendly "You Are here" label.
- 3. Holdings are organized into four categories (people, places, subjects, catalogs) labeled with clear, task-oriented titles.
- 4. Links to secondary tasks are tucked below the section's holdings-related links, underscoring their relative importance.
- 5. Quick links are present again on this page but this time they are strictly related to the section's content.
- Likewise, news items and podcasts are filtered to only show items relating to the section's content.



### naa.gov.au

 Though the layout superficially shares much in common with the UK Archives, the Australian Archives' site is hampered by uninspiring design and serious usability issues.

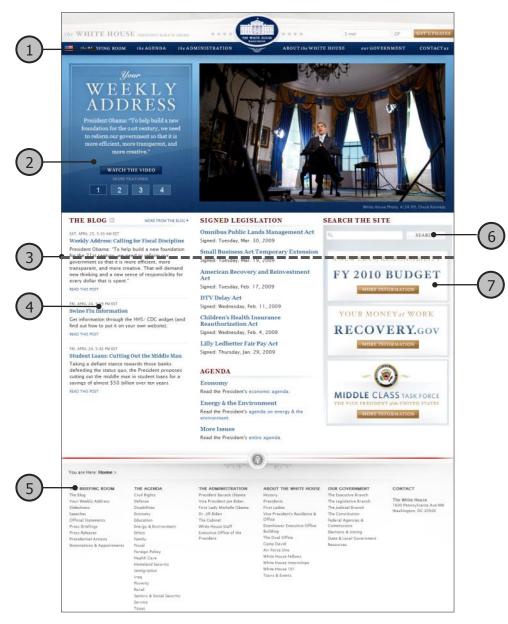
- 1. Primary navigation is kept simple (only 6 top level items) but the links contained within the drop down menus have vague and confusing labels like "Scope" and "Check Up."
- 2. This central graphic takes up valuable real estate and doesn't convey a clear message (what does "Shake Your Family Tree" mean?).
- 3. Like the UK, secondary links are neatly tucked away at the bottom of the page.
- 4. The site is designed to fill the entire browser width which causes uneven spacing in the nav bar and large areas of unsightly white space.
- 5. The services menu provides audience-specific content similar to that on the Archives.gov site.
- 6. The concept of having quick links is clearly a good one. However, topics like "Media Releases" have a narrow appeal and most likely should not be featured so prominently.



## whitehouse.gov

 This well-designed, elegant site combines a clearly-organized framework with an obvious visual hierarchy. It is, however, not without a number of flaws.

- 1. Complex menu options are compressed into an efficient, classy menu bar. Nomenclature is a little unclear (e.g "The Briefing Room" could be renamed more logically as "Current News").
- 2. A rotating feature dominates the page and is the focus of attention. Note how it is limited to four slides—all of which are easily accessible.
- 3. The dotted line represents the "fold" on a 1024x768 monitor. The size of the slideshow forces too much of the content off the screen.
- 4. Current topics and blog entries are prominent and clearly organized by topic.
- 5. A Web 2.0-style site map puts the entire site at a visitor's fingertips without leaving the page.
- 6. The search box is displayed in an unexpected location (it is typically in the upper right corner). This could be confusing to some.
- 7. Secondary features are prominent and designed consistently.



## fema.gov

 While the site is somewhat bland visually, it manages to efficiently pack a great deal of information into a compact layout.

- 1. Global links and the search box are discretely placed where users expect them to be though they could be consolidated within the header to reduce the amount of wasted space.
- 2. Rather than employ drop-downs, the primary navigation bar takes users directly to the portal pages for each topic.
- 3. Role-based navigation is prominently place and includes a "More Audiences..." link.
- 4. A dominant but reasonably-sized feature area incorporates a 3-panel slide show. The beveled edges are somewhat outdated however.
- 5. Quick links take users to popular content areas.
- 6. The display of headlines in two areas of the page is redundant and potentially confusing.
- 7. While providing media tools in a common area is good, it is unclear whether the tools relate to only the headlines section or the whole page.



### epa.gov

 This site is also uninspiring design-wise but its use of interactive elements like accordion boxes and tabs make it an example of how a page's real estate can be utilized efficiently.

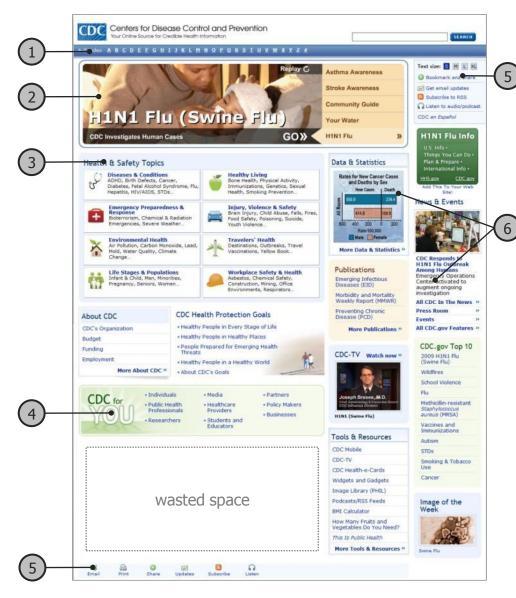
- 1. The header is excessively tall and gives unnecessary priority to multi-lingual capabilities,
- 2. A clearly-labeled menu bar takes visitors directly to key areas of the site.
- 3. While the audience-specific links are good, they may be misplaced. Lists of links are typically found on the left or right while the center column typically holds content.
- 4. Accordion panels are used throughout the site. While they may be disorienting for first-time users, they can provide an economical means of organizing content.
- 5. The tool box has clear labels and uses well-designed icons. User testing can reveal whether its placement in the footer makes sense.
- 6. Tabbed panels, while effective and widely understood as interface elements, should look like tabs. The buttons used here are confusing and do not reinforce the tab metaphor.



## cdc.gov

 With a design on par with that of the EPA and FEMA, the CDC's site incorporates many good interface elements, however, their placement and effectiveness is not always optimal.

- 1. Having an index in place of a primary navigation bar is inconsistent with user expectations and possibly confusing.
- 2. The topic list at the right of the slide show provides an effective means of previewing the slides that are currently hidden.
- 3. While well-organized and clearly presented, these topics are most likely the ones which should be displayed in place of the A-Z Index.
- 4. The role-based links are placed below the fold and aren't immediately available to visitors.
- 5. Nearly identical sets of page tools are placed in two different locations. This is redundant and takes up valuable above-the-fold real estate.
- 6. Frequently-changing information is conveniently organized in two columns occupying the right third of the page.



### microsoft.com

- When you consider the depth of information and broad range of user types Microsoft's site needs to support, the elegance of the home page is remarkable.
- Pay attention to the amount of "breathing room" given to the page elements.
- Things to observe:
  - 1. Simple, prominently-placed search dominates the upper part of the page.
  - Complex drop-down menus are masked by a simple, logically-organized primary navigation bar.\*
  - 3. Rotating features dominate the page and focus visual interest.
  - 4. Secondary navigation is driven by user type.
  - 5. Topical points of interest are dynamically displayed based on the selected user type and are called out using action-oriented link names (e.g. "Get a Free Web Site").
  - 6. The most popular items are prominently and clearly displayed.

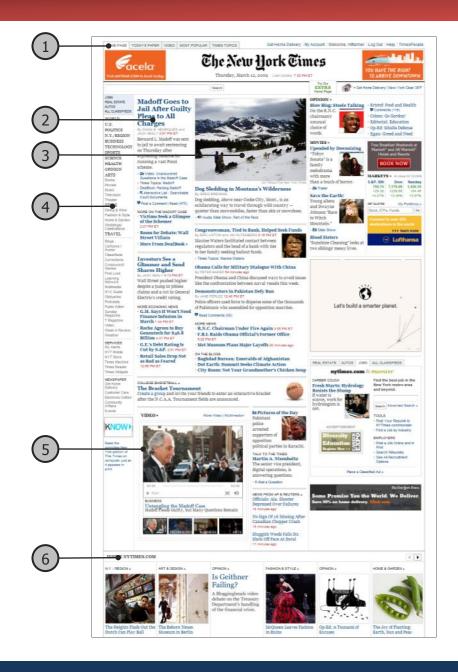


<sup>\*</sup>The menu system employed here (and on the White House site) are examples of mega-menus, an emerging menu style that usability expert Jakob Nielsen encourages sites to adopt in lieu of traditional drop-down menus. See the online article at www.useit.com/alertbox/mega-dropdown-menus.html.

## nytimes.com home

Yes, the site is cluttered (it deliberately mimics the familiar "front page" model familiar to NYT readers) but on examination, it provides logical and clear access to a staggering amount of information.

- 1. Key site (not newspaper) sections are called out at the top.
- 2. Though the content changes on a minute-byminute basis, it is always presented consistently with a clear hierarchy.
- 3. A single image focuses visitor attention.
- 4. Site sections mimic newspaper sections, are organized by importance and link to portal pages uniquely designed to present each topic in the most effective manner.
- 5. Video is embedded "YouTube-style" directly into the home page.
- 6. Though presented below the fold, the scrolling features present topical information vibrantly and compactly (this may be a good alternative to the slide show on archives.gov).



## nytimes.com portal pages

The portal pages that represent the varying sections of the newspaper maintain navigational, stylistic and brand consistency while fine-tuning the presentation of the content to best feature the particular type of information within each.







**Business Section Portal** 

**Opinion Section Portal** 

**Travel Section Portal** 

## relating these examples to archives.gov

- The UK and Australian Archives provide an intriguing example of how two sites, with mandates nearly identical to NARA's, tackle the same problem with vastly different results:
  - There is much to be learned from the UK site. It's simplicity, logical organization, task-based orientation and clear nomenclature puts its vast holdings and array of services at a visitor's fingertips.
  - The UK Archives' records page (www.nationalarchives.gov.uk/records/) organizes holdings clearly by topic and neatly presents research-related content. It should be used as a model for NARA's consolidated holdings section.
  - The Australian Archives' site is largely a cautionary tale. While the home page provides an overall organization that works, the details of its execution are sloppy. The variable-width layout, unclear nomenclature and prominence of unimportant items make it a site more focused on internal priorities than its visitors and their goals.
- The White House's site demonstrates how a complex home page consisting largely of dynamic elements can still be beautifully designed. Archives.gov should consider:
  - Setting up a clear hierarchy between primary, secondary and tertiary elements and using it to focus the visitor's attention on critical page elements.
  - Establishing strict design guidelines to control use of color, type and imagery so frequentlychanging elements like banners and features can work harmoniously within the overall design

## relating these examples to archives.gov, cont.

- The FEMA, EPA and CDC sites deal with broad agency mandates and manage to accommodate a diverse range of needs within efficient frameworks.
   Archives.gov should consider:
  - Ways that these sites accommodate multiple modes of accessing information (by topic, usertype, frequently-accessed pages, etc.) can be adopted to NARA's objectives.
  - Utilizing interactive elements like tabbed boxes to minimize the amount of screen real estate required to display information on related topics.
  - Deploying a dominant and easy-to-use rotating feature containing around 3-5 panels in place
    of the current slide show. The CDC's use of preview topics is a good feature that could be coopted as well.
- Microsoft's site shows how a complex site that addresses multiple audience types (with very different needs) can be made clean and simple.
   Archives.gov should consider:
  - Trying to achieve a comparable level of white space and openness in its home page design.
  - Collapsing complex and detailed menus into a handful of most-relevant topics.
  - Ensuring that only information relevant to the broadest number of visitors gets prominent home page placement. More specialized information can be pushed to the portal pages.

## relating these examples to archives.gov, cont.

- The nytimes.com site provides a strong model for understanding how portal pages can be developed that work within a consistent framework but are still tuned to their sections' unique needs.
  - The overall effect is one that allows each portal page to best present its content, tools and features—variety within a unified architecture.
  - Features are tuned to the content within a specific section (e.g. a trip planner in the travel section, market data in the business section, etc.). The new Archives.gov should follow this model with flexible portal pages fine-tuned to their respective section's content.
  - Common elements are placed consistently to minimize confusion and maintain consistency (e.g. top-level navigational items remain consistent, the left 2/3 of the page is reserved for articles, etc.)

### action items

We recommend that NARA not only include the redesign of the home page in the scope of this initial project but also extend it to include the redesign and testing of key portal pages.

#### 1. Develop/refine the site's information architecture.

- Identify primary and secondary priority portals.
- Organize the home page and primary portal navigational systems into a site map that shows what pages are linked, how they are linked and how they are named in the menu system.
- Develop wireframe designs for the home page and a typical design for the portal page.

#### 2. Craft visual design alternatives.

- Identify a consistent color palette and develop rules for its application.
- Develop design alternatives for the home and typical portal pages (perhaps showing how the design could be extended to content pages as well).

### 3. User test the new design(s).\*

- Perform controlled "pencil browsing" tests to validate organizational and naming decisions.
- Present design alternatives in controlled testing environment and solicit user feedback.
- Incorporate valid user suggestions into the information architecture.

<sup>\*</sup>See Chapter 9 of Steve Krug's excellent usability guide Don't Make Me Think for a low-cost, proven approach to user testing.

### action items, cont.

#### 4. Pilot the new design

- Create actual home and primary portal pages for the site and post to the live server.
- Allow users to browse the site using these pages and solicit feedback.
- Refine and finalize the design based on user comments.

#### 5. Apply the design site wide

- Develop a standard set of icons, headers and other design elements for use across the site.
- Create portal pages for all role and task portals.
- Reorganize internal content pages into a consistent architectural and visual design scheme as appropriate to their respective site sections.
- Develop site editing guidelines to help content authors and web developers maintain the consistency of the overall design.

### data sources

#### **Site Traffic Analysis**

- ACSI ACSI Survey (7/1/2008-12/31/2008)
   1,970 respondents
- ACSI Cluster Data Analysis (12/1/2008-12/31/2009)
   3,081 respondents
- ACSI ACSI Survey—Records Managers (10/01/08-03/31/09)
   472 respondents
- WebTrends Traffic Analysis Summary (1/1/2009-12/31/2009)
- WebTrends Home Page Click Path Report (4/2009)

#### **Relevant Publications**

- Krug, Steve. Don't Make Me Think: A Common Sense Approach to Web Usability. Berkeley, Ca: New Riders, 2006
- Nielsen, Jakob. "Mega Drop-Down Navigation Menus Work Well." *Useit.com:* Alertbox. 23 Mar. 2009. < http://www.useit.com/alertbox/mega-dropdown-menus.html>
- Spool, Jared M. et.al. "Designing For the Scent of Information." UIE Fundamentals Report, 2004

